

**SCIENTIFIC PANEL REVIEW OF BIOLOGICAL
RESOURCES IMPACTS AND PROPOSED
MITIGATION FOR THE POTRERO HILLS
LANDFILL PHASE II EXPANSION**



Contra Costa Goldfields, Directors Guild Mitigation Area

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List of Acronyms

AEC	Airola Environmental Consulting
AUM	animal-unit-month
BCDC	Bay Conservation and Development Commission
CEQA	California Environmental Quality Act
CIPPC	California Invasive Plant Pest Council
CNPS	California Native Plant Society
CO ₂	carbon dioxide
the Commission	Bay Conservation and Development Commission
County	Solano County
DFG	California Department of Fish and Game
EIR	environmental impact report
ESP	Environmental Stewardship & Planning
Grazing Management Plan	Potrero Hills Mitigation Site Grazing Management Plan
Grassland Management Plan	Potrero Hills Landfill Grassland Management Plan for Mitigation Areas
JVEC	Jane Valerian Environmental Consulting
km	kilometer
Landfill	Potrero Hills Landfill
LPP	local protection program
mi	mile
MPP	Mitigation and Monitoring Plan
MSL	mean sea level
NSC	native species component
USFWS	U.S. Fish and Wildlife Service

Chapter 1. Introduction

This document provides the results of an independent review conducted by a panel of scientists of biological resource impacts and proposed mitigation for the Phase II Expansion of the Potrero Hills Landfill (the proposed project). This section describes the administrative basis of the review, background on panel establishment, and the goals and general methods employed for the review.

The project and its features are described in a variety of documents, including the project Environmental Impact Report (EIR; EDAW 2005) and Mitigation and Monitoring Plan (Environmental Stewardship and Planning [ESP] and LSA Associates 2006). The project area and its surrounding setting is depicted in Figure 1-1. The project footprint and proposed mitigation areas and project features are shown in Figure 1-2.

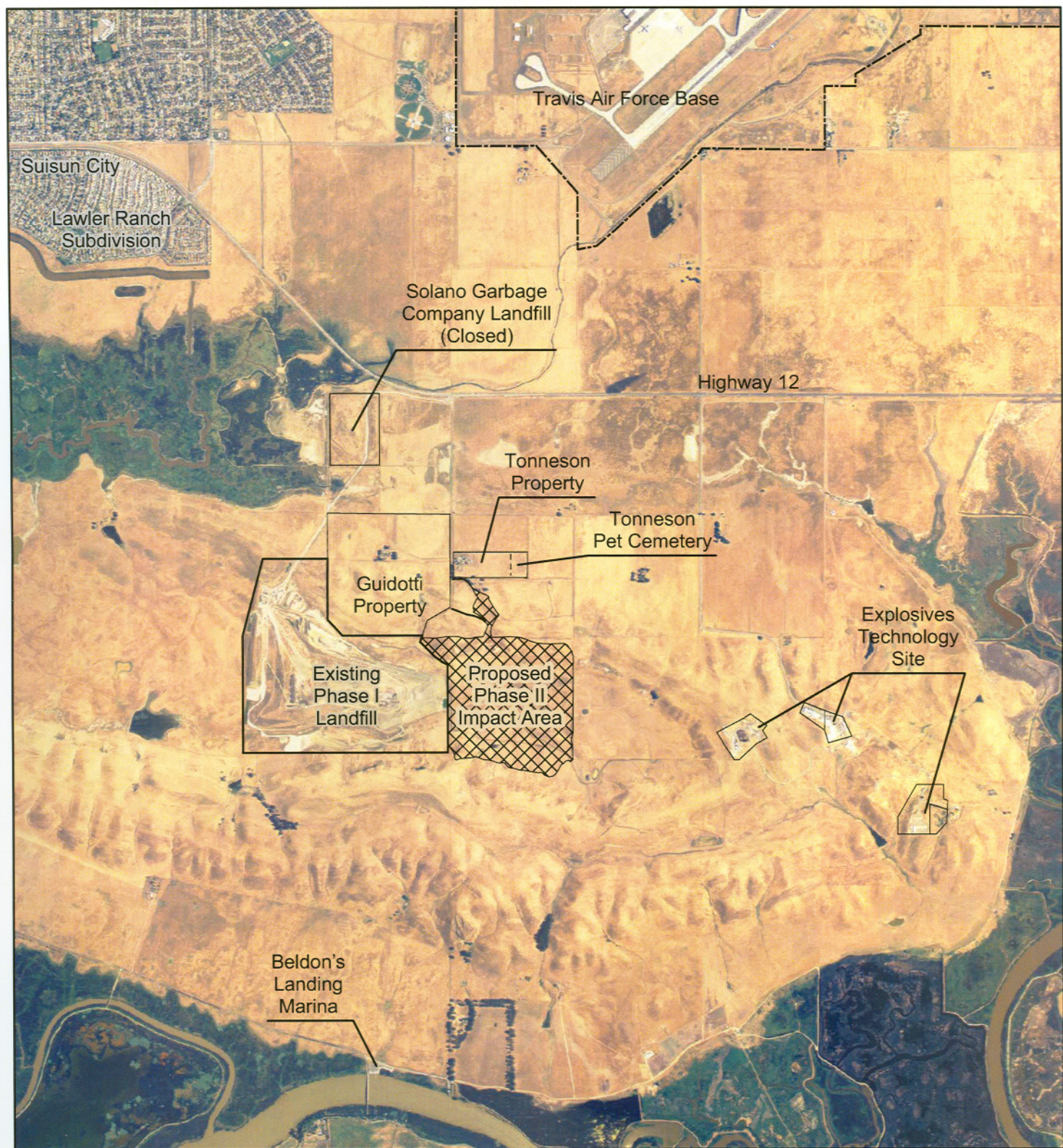
BACKGROUND

The California State Legislature passed the Suisun Marsh Preservation Act in 1977 to preserve and enhance the quality and diversity of marsh habitats and to ensure the retention of upland areas adjacent to the marsh in uses compatible with its protection. The preservation act gave formal legal authority to the policies and programs of the Suisun Marsh Protection Plan developed by San Francisco Bay Conservation and Development Commission (BCDC or the Commission). The protection plan regulates activities within a primary management area (wetlands) and a secondary management area (uplands adjacent to the primary management area that serve as a buffer between the marsh and adjacent lands). Development within the primary management area requires a marsh permit directly from BCDC.

The Suisun Marsh Preservation Act grants direct permit authority to BCDC over the primary management area of the Suisun Marsh. The Act also required local agencies to develop local protection programs (LPPs) to bring county policies and ordinances into conformity with the preservation act and the protection plan. Marsh development permits for development in the secondary management area are issued by Solano County (County). Granting of the permits by the County can be appealed to BCDC if the decision appears to be inconsistent with the LPP, the Suisun Marsh Preservation Act, or the Suisun Marsh Protection Plan.

The project site lies within the eastern edge of the secondary management area. Therefore, Solano County has the authority to issue the marsh development permit. A Draft EIR for the project was issued by the County in November 2003 (EDAW 2003) to comply with the California Environmental Quality Act (CEQA). The Final EIR (EDAW 2005) was certified by the Solano County Board of Supervisors on September 19, 2005.

On September 13, 2005, Solano County modified Marsh Development Permit No. MD 88-09 to authorize expansion of the existing 320-acre Potrero Hills Landfill (Landfill) onto an adjacent 260-acre parcel (referred to in this report as the “Phase II expansion area”) and changes in



Source: PHLF 2007

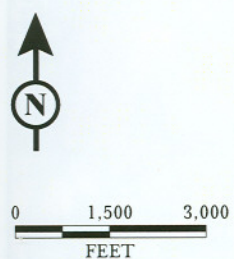
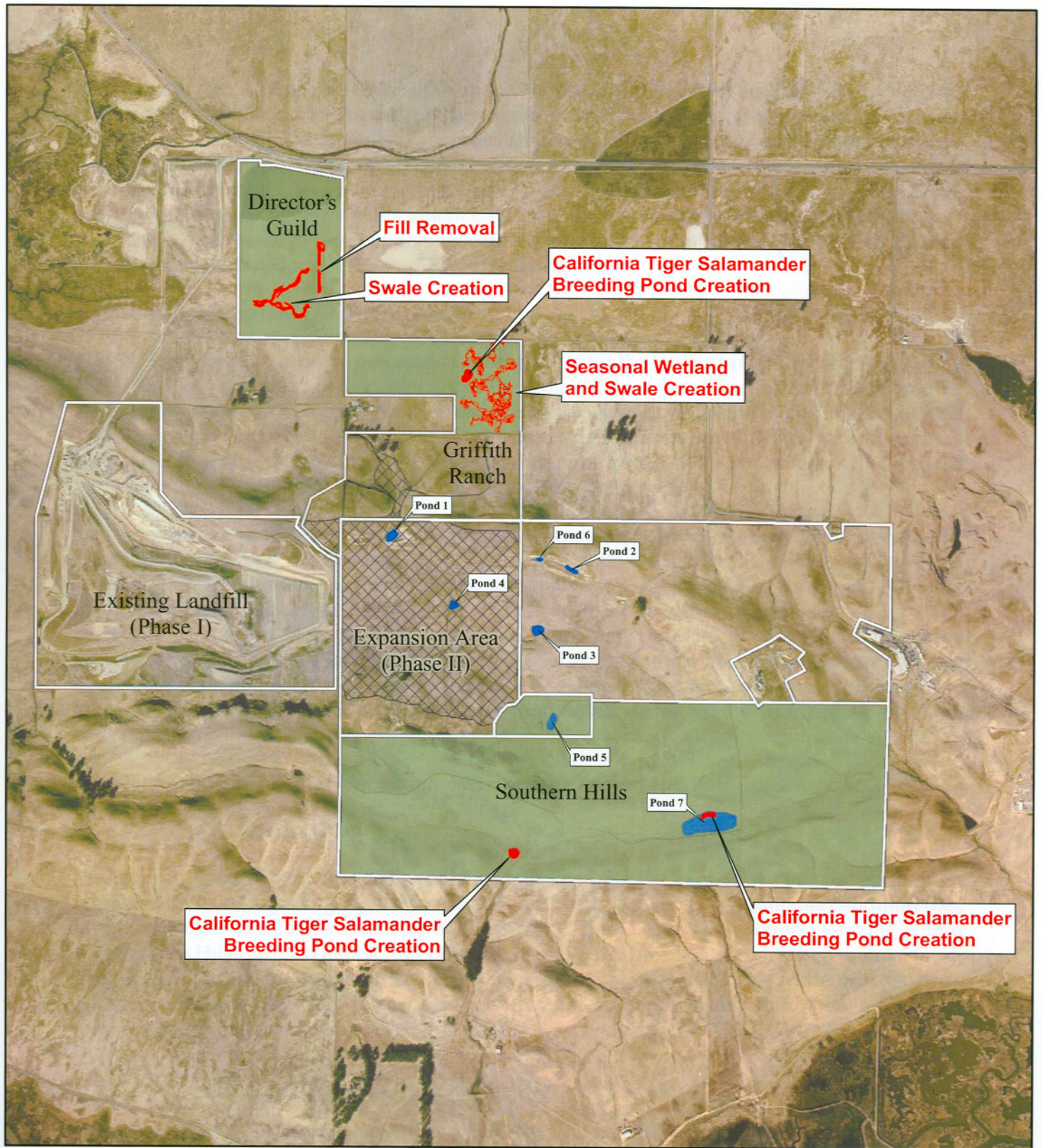


FIGURE 1

Potrero Hills Landfill Phase II Expansion

General Location Map



Source: PHLF 2007

FIGURE 14

Potrero Hills Landfill Phase II Expansion

Proposed Mitigation Areas



0 500 1,000 2,000
FEET

PRESERVED AND PROTECTED
 PONDS

Landfill operations. BCDC received 10 appeals of this County action. The Suisun Marsh Preservation Act provides that, when BCDC receives appeals on a project, it must first determine whether the appeals raise a substantial issue as to the conformity of the proposed project with the Suisun Marsh Preservation Act, the Suisun Marsh Protection Plan, and the Solano County component of the Suisun Marsh LPP. Unless the Commission determines that the County's action does not raise a substantial conformity issue, the Commission must hold a hearing on the project.

On December 1, 2005, the Commission determined that appeals of the Solano County's Marsh Development Permit No. MD 88-09 raised substantial issues regarding compliance of the proposed project with the laws and policies that govern development in the Suisun Marsh. Therefore, the Commission will hold a hearing on the project and determine whether a permit can be issued. The Commission determined that, before it considers the project, additional information was needed on the potential impacts of the proposed project and on the effectiveness and scope of the proposed mitigation.

BCDC established an independent science panel to assist the Commission in evaluating whether the proposed project complies with the relevant Solano County LPP policies. The panelists were charged with analyzing the potential environmental impacts of the proposed expansion on habitat and associated wildlife at the project site, and with reviewing the appropriateness and adequacy of the proposed mitigation. This report presents their analyses and conclusions, which will be used by Commission staff during review of the project.

GOALS OF THE REVIEW

BCDC approved the goals and general approach for the review on February 16, 2006. The scope of the review called for an independent scientific review of the biological impacts associated with the proposed project and the adequacy of proposed mitigation measures. The approved scope is included as [Appendix A](#). Specified goals of the review were to:

- Evaluate the potential adverse impacts of the proposed project;
- Evaluate proposed mitigation for impacts to the environment, habitats, and species;
- Prepare a written report that summarizes the individual panel members' conclusions;
- Meet with the Commission and Landfill staff to discuss the evaluations and report;
- Address questions posed by Commission and Landfill staff by supplementing the report; and
- Attend the public hearing held by the Commission for the proposed project and be available to answer questions.

This written assessment is one of several means to aid BCDC staff and the Commission in evaluating whether the proposed project complies with the relevant Solano County LPP policies and meets the standards for approval of a BCDC marsh development permit.

METHODS

This section describes the general methods for defining the scope for the reviews, selecting reviewers, and the general procedures by which reviews were conducted and compiled. More specific information regarding the methodologies used by each reviewer is presented as a separate section in the subsequent resource chapters.

Review Organization and Staffing

BCDC developed and approved a scope for the scientific review that defined the review process and schedule ([Appendix A](#)). Commission staff identified four key biological resource areas for independent review: botanical and wetland resources, land and habitat management, California tiger salamander, and birds. The Commission staff and Landfill representative, Steve Peterson of Environmental Stewardship and Planning (ESP), agreed to hire Dan Airola of Airola Environmental Consulting (AEC) to serve as the Technical Manager for the scientific review process. Mr. Airola's role was limited to administering and managing the review process and editing and compiling the report; his technical involvement was limited to peer discussions and review of panelist's reports to clarify issues, analysis, and presentation of results.

Candidate reviewers were identified by Jenn Feinberg (BCDC Project Manager), Steve Peterson, and Dan Airola. Ms. Feinberg reviewed qualifications of potential reviewers, discussed them with Mr. Peterson and Mr. Airola, and then contacted qualified reviewers to determine interest and availability. Ms. Feinberg then selected the following reviewers for the key biological areas:

- Ayzik Solomeshch – Botanical and Wetland Resources (Chapter 2 of this report),
- Pam Muick – Vegetation Resources and Grazing Management (Chapter 3 of this report),
- H. Bradley Shaffer – California Tiger Salamander (Chapter 4 of this report), and
- W. David Shuford – Birds (Chapter 5 of this report).

Subsequent to the original selection, Dr. Shaffer recruited the assistance of Chris Searcy, a graduate student at UCD to assist as a collaborator in evaluating impacts to the Tiger Salamander.

Guidance for Panelists

Reviewers were directed to conduct an independent evaluation of project impacts and the proposed mitigation program. The review was not intended to be bounded by legal determinations of CEQA or other laws and regulations. It also was not intended to evaluate the

specific determinations of the Project EIR. Rather, it was intended to provide an independent evaluation of potential biological resource impacts and the adequacy of proposed mitigation.

Panelists were given guidance regarding the general scope and content of their reviews. Objectives of the individual reports were to:

- Characterize resources (within each expert's purview) at the site,
- Evaluate effects of the proposed project,
- Evaluate the proposed mitigation program,
- Identify potential modifications or implementation measures for incorporation into the landfill expansion, and
- Identify potential modification to the mitigation program to more effectively mitigate potential effects of the project.

Documents Reviewed

The Landfill provided copies of relevant documents that would serve as references for identifying potential impacts and the scope of the proposed mitigation program. These documents, listed in Chapter 6, included the Draft EIR for the project (EDAW 2003), which is referred to in this report as the "Project EIR"; the Mitigation and Monitoring Plan (MMP) (ESP and LSA Associates 2006); and the Mitigation Site Grazing Management Plan (LSA Associates 2006), which was subsequently revised as noted below. The Landfill also provided the wetland delineations conducted for the project site, the adjacent Eastern Valley property, and the proposed mitigation properties: Southern Hills, Eastern Valley, Griffith Ranch, and Director's Guild (LSA Associates 2001, 2003, 2004). BCDC provided additional background documentation (DFG 1975).

Preparation of Draft Reviews

An initial site reconnaissance was conducted on May 23, 2006, when all panel members (and AEC, ESP, and BCDC staff) visited the existing landfill, proposed expansion area, and all mitigation areas. Individual panelists were given full access to conduct additional field surveys in 2006, which are described in individual report chapters. Following 2006 field surveys and initial analysis of impacts and mitigation, panel members met with BCDC staff on July 20, 2006 to report on and exchange information about their findings and to identify any additional information needed from the Landfill. Panel members then prepared draft versions of their reports, which were reviewed and edited by the Technical Manager, revised by panelists, and submitted to BCDC on August 28, 2006.

During preparation of the draft reports, panelists maintained ongoing communication with the Technical Manager and with BCDC and ESP, as needed, to obtain information on which to base the analysis. Although the panel members and Technical Manager agreed that the information provided was largely sufficient to conduct the evaluation, some requested information could not

be provided by ESP or the Landfill within the timeframe of the review for completion of the draft report.

Preparation of Final Reviews

Following delivery of the Draft Review Report, BCDC and the Landfill provided review comments and additional information for consideration by the panelists. Comment letters from BCDC and the Landfill are included in Appendices B1 and B2, respectively. The Landfill provided formal comments on all chapters except Chapter 4, for which only informal comments were made (i.e., via several e-mails). Although these informal comments are not included in this report and formal responses to the comments were not prepared, the comments were considered in revising Chapter 4.

Most of BCDC's comments addressed the adequacy of the information for the review and requested some clarification of recommendations. The Landfill's comments included additional clarifications as well as challenges to some of the methodologies, conclusions, and recommendations of the reviews. In response to the draft reviews, the Landfill modified some aspects of the project and clarified others. Information provided by the Landfill, in addition to their comment letter, included:

- Clarification of the landfill size and configuration,
- A description of modification of the project that relocated the power plant to within the footprint of the existing Landfill (and thus away from its previously proposed site on the Griffith Ranch property), and
- Revision of the Potrero Hills Mitigation Site Grazing Management Plan (Grazing Management Plan) (LSA Associates 2006) by broadening its scope and re-characterizing it as the Potrero Hills Landfill Grassland Management Plan for Mitigation Areas (Grassland Management Plan) (LSA Associates and ESP 2007).

Panelists were directed to provide separate responses to BCDC's comments, which are included in Appendix C (except for Chapter 4, for which no responses to comments were prepared). Panelists were instructed to review the Landfill's comments and to make their own decisions about whether to incorporate suggestions and information into this final review report. The Technical Manager and BCDC staff Project Manager reviewed comments from the Landfill and identified key comments that warranted a formal response from review panelists regarding their treatment of the comment ([Appendix B1](#)). The panelists' responses are included in Appendix D.

Panelists then revised their reports based on the comments and new information provided. The revised reports and responses to comments were reviewed and assembled by the Technical Manager and delivered to BCDC as this final review report.

Subsequent to the delivery of the analyses of the proposed project by the panelists (and presumably partly as a result of comments by panelists), the Landfill has verbally committed to relocate the proposed sedimentation basin to an area within the Spring Branch Creek watershed (S. Peterson, pers. comm.). Therefore, panelists' comments refer to the previous (and still

formally proposed) sedimentation basin site, which is tributary to the Griffith Ranch and Director's Guild mitigation properties.